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Comparative Analysis of Risk, Profitability, Market Ratios and Asset Selection in Tesla, Apple, and Exxon Mobils

Chenxi Zhang *

Knowledge-First Empowerment Academy, Houston, United States

* Corresponding Author Email: swordkok@tzc.edu.cn

Abstract. Asset allocation is a fundamental aspect of attaining financial growth and stability. This study explores three major companies: Tesla, Apple, and Exxon Mobil—competitors in the automotive, technology, and energy sectors consecutively. From the point of view of investing in the companies, the study provides a discussion on various financial indicators (beta, debt ratio, profit margins, market to book ratio) to understand what investors may pay attention to in choosing the most suitable companies to invest. It is found that Tesla, given that it has a high beta and a potential for growth, is more appealing for growth and momentum investors who are more inclined to take risks to get better rewards. In the meantime, Exxon Mobil, as a not very high-risk company, still provides consistent profits for growth and income investors who look for reliable dividends through the entire period. Apple is a popular choice for investors who seek positive earnings, innovation, and market dominance because investors across the board, including those looking out for PEG ratio and DCF (Discounted Cash Flow) analysis, are attracted by these imperatives. Thus, the paper generates valuable guidance to the shaping of investment strategies to correspond with particular financial situations and firm kinds.

Keywords: Financial analysis; Investor strategy; Investment decision-making.

1. Introduction

Investing is a fundamental aspect of financial planning, offering individuals and institutions the opportunity to grow wealth, diversify their portfolios, and achieve long-term financial objectives. In today's dynamic and interconnected global economy, selecting the right assets has become increasingly critical, as markets are influenced by a multitude of factors such as technological advancements, geopolitical events, and economic shifts. Investment decisions can significantly impact the performance of a portfolio, determining not only its short-term gains but also its long-term sustainability and resilience to market fluctuations. The article "Diversification and portfolio theory: a review" also highlights the importance of diversification as a key strategy in investment decision-making under risk and uncertainty. The review suggests that by allocating investments across a variety of assets, investors can reduce potential losses and strengthen portfolio stability, especially in volatile markets [1].

This study focuses on three well-known companies: Tesla, Apple, and Exxon Mobil. Each company is a leader in its industry—automotive and energy, technology, and oil and gas, respectively. These companies were chosen for their distinct characteristics and their importance in their respective sectors. By analyzing their financial metrics, this paper aims to provide a comprehensive understanding of their investment potential.

2. Profile of the Selected Companies

Tesla is a pioneering company in the electric vehicle and energy storage industry, renowned for its innovative products and mission to accelerate the global transition to sustainable energy. Founded in 2003 by a group of engineers, Tesla quickly became a leader in the development and production of electric vehicles, ranging from the mass-market Model 3 to the high-performance Model S and Model X. Beyond cars, Tesla has made significant strides in energy storage solutions, with products like the

Powerwall and Powerpack that aim to revolutionize energy consumption and distribution. Tesla's commitment to innovation is further demonstrated by its continuous advancements in autonomous driving technology and its ambitious goals, such as developing fully self-driving cars and expanding its Supercharger network globally. With its charismatic CEO Elon Musk at the helm, Tesla has not only captured the imagination of consumers and investors alike but has also positioned itself as a key player in the shift towards a more sustainable future.

Apple is a global technology giant known for its consumer electronics, software, and services, with a dominant position in the global market. Established in 1976 by Steve Jobs, Steve Wozniak, and Ronald Wayne, Apple revolutionized personal computing with the introduction of the Apple II and later the Macintosh. The company's product lineup has since expanded to include the iPhone, iPad, Mac, Apple Watch, and Apple TV, each setting industry standards in design, functionality, and user experience. Apple has also developed a robust ecosystem of software and services, including the iOS and macOS operating systems, the App Store, iCloud, Apple Music, and Apple Pay, which not only enhance the user experience but also drive significant revenue growth. Apple's commitment to innovation, quality, and customer satisfaction has made it one of the most valuable companies in the world, with a loyal customer base and a strong brand reputation that continues to influence the technology industry.

Exxon Mobil is one of the world's largest publicly traded oil and gas companies, focusing on the exploration, production, and distribution of energy resources. With roots tracing back to the late 19th century, Exxon Mobil was formed in 1999 through the merger of Exxon and Mobil, both of which were descendants of John D. Rockefeller's Standard Oil Company. The company operates across the entire energy value chain, from upstream activities like oil and gas exploration and production to downstream operations, including refining, marketing, and chemical production. Exxon Mobil has a vast global presence, with operations in more than 50 countries and a diverse portfolio that includes conventional oil and gas, deepwater, liquefied natural gas (LNG), and petrochemicals. Despite the challenges posed by the transition to cleaner energy sources, Exxon Mobil remains committed to meeting the world's growing energy demand while investing in research and development to reduce its environmental impact and explore new opportunities in renewable energy and carbon capture technologies.

3. Financial Indicators of the Companies

Financial indicators provide critical insights into the operational efficiency, risk levels, and overall financial health of a company. This study collects financial data from 2024 to analyze the risk, profitability, and market ratios of Tesla, Apple, and Exxon Mobil.

3.1. Risk

Risk in the context of investment refers to the potential for financial loss or unfavorable outcomes. It is assessed using three key indicators: market capitalization (which reflects the company's overall market value), beta (which measures stock volatility relative to the market), and the total debt ratio (which indicates the proportion of a company’s assets financed by debt). The following Table 1 presents the risk indicators for Tesla, Apple, and Exxon Mobil.

Table 1. Risk

Company	Market Cap (Billion $)	Beta	Total Debt Ratio (%)
Tesla	762.86	2.31	0.40
Apple	2.88 Trillion	1.24	0.55
Exxon Mobil	527.45	0.89	0.16

Tesla presents a beta value of 2.31, proving that its stock usually moves with the market in the same or opposite occurrences, but many times with a greater magnitude. This high beta reflects the company's significant volatility and exposure to market risk, which could be attributed to its

aggressive innovation strategies in electric vehicles and environmentally friendly energy sources. Tesla's considerable market risk is driven by its innovative but capital-intensive operations, which can lead to significant stock price movements either upward or downward within a short time frame. The paper on "Volatile Behaviors with the Asymmetric Stochastic Volatility Model" also highlights Tesla's pronounced volatility, noting that negative market events disproportionately increase its stock volatility. This further emphasizes Tesla's sensitivity to market conditions, underscoring the impact of its high-risk, high-reward business strategies [2].

Apple's correlation with market movements, as portrayed by its beta of 1.24, implies a more balanced risk environment. This moderate beta suggests that while Apple's stock generally follows market trends, it is more stable than high-beta stocks such as Tesla—although this may not hold true in current practice. The company demonstrates these virtues through its well-established brand, consistent profitability, and broad product line. The moderating beta of Apple, in contrast to the benchmark, can likely be attributed to its leadership in the technology sector, allowing it to generate significant income from its diverse product lines, thereby reducing dependency on overall market conditions. As noted in the paper "Determinants of Risks and Performance in Apple Inc.," the company's profitability and risk management are influenced by both internal and external factors, highlighting the importance of market risk management and the unique position of Apple within the industry [3].

Conversely, with a beta of 0.89, Exxon Mobil showcases the slowest beta, hence the least volatility and the highest level of stability among the three companies. The conservative financial strategy and stable operations in the energy sector, where demand for oil and gas remains relatively constant despite broader market trends, contribute significantly to Exxon Mobil's lower beta. This aligns with the findings in Luo's study, which also highlights the importance of financial structure in mitigating risk, especially in volatile markets. The paper further notes that Exxon Mobil's focus on expansionary projects in production, refining, and distribution serves to insulate its stock from market volatility, reinforcing its reputation as a stable entity in the energy sector [4].

Apple has the maximum credit risk of debt financing its assets with 0.55, while the least is Exxon Mobil with 0.35, meaning that most of its assets are funded through equity generated by the company itself. This may be due to Apple's strategy of having a low debt level, making debt affordable, and borrowing to pay stock dividends, expand the business, or for any other reasons. On the other hand, Tesla's level of total debt is a little lower than Apple's, but at the same time, it shows that it also relies on the debt to finance its operations, given the capital-intensive nature of this business. In a related development, Exxon Mobil’s bottom position on the table regarding total debt ratio displays a low debt level and a financially conservative posture, which shows it is always keen on averting instability as this is a normal phenomenon in the cyclic energy sector.

3.2. Profitability

Profitability pertains to a company's capacity to make a profit from a business or investment operation, implied from the perspective of the current financial health. This shows that profit margins tend to represent the degree of efficiency of the business operation. In this study, profitability is reflected using four key indicators: Total Asset Turnover, Profit Margin, Return on Assets (ROA), and Return on Equity (ROE). The major metrics that determine sales generation with the organization’s assets can be explained by the Total Asset Turnover, which is arrived at by a ratio of total revenue to total assets and is emphasized more by the higher value, indicating more efficient assets in producing sales. Profitability margins give a clear indication of the total revenues left as profit and the lesser rate of expenses that are deducted from those revenues; a higher profit margin implies better profitability. Return on Assets (ROA) gauges how strategically a company uses accrued assets toward profitability, benchmarked by dividing net profits over total assets. A higher value of ROA implies that a company is more efficient in asset utilization. Conversely, Return on Equity (ROE) appraises the extent of profitability increment against the shareholders' equity by dividing net profit by the number of shares outstanding. A higher value of ROE in businesses indicates better profitability, as it helps generate

more profit for the shareholders. Specific figures are shown in Table 2 below, which are used to consider the three factors.

Table 2. Profitability

Company	Total Asset Turnover	Profit Margin (%)	ROA (%)	ROE (%)
Tesla	0.19	15.45%	4.67%	11.24%
Apple	0.87	28.21%	16.57%	38.33%
Exxon Mobil	0.84	10.00%	7.35%	14.69%

In terms of the three companies, Apple exhibits the highest profitability, with a profit margin of 28.21%, indicating its remarkable ability to convert a significant portion of its income into revenues. The Return on Asset (ROA) of 16.57% reflects the company's efficient use of its assets to generate profits, while the Return on Equity (ROE) of 38.33% suggests that Apple is highly effective at generating profits from shareholders' investments. These statistics underline that Apple's financial strength extends beyond its brand name, positioning it to yield positive returns in various business environments due to its pricing power, diverse offerings, and operational efficiency. The thesis "Profitability Assessment of Apple Company" by Huanyu Li (VSB—Technical University of Ostrava, Faculty of Economics, Department of Finance) also analyzes Apple's financial performance. The thesis uses financial analysis tools such as Common-size analysis and various financial ratios, including ROA and ROE, to assess Apple's profitability. It further discusses how Apple's strategic management decisions contribute to its market leadership and financial success [5].

Tesla's profitability, demonstrated by a profit margin of 15.45%, is commendable, especially given the company's focus on rapid growth and innovation within the highly competitive electric vehicle (EV) market. This profitability level reflects Tesla's strategic balance between expansion and maintaining a stable profit margin. The return on assets (ROA) of 4.67% is lower compared to companies like Apple, largely due to Tesla's heavy investments in new infrastructure and cutting-edge technologies. This aligns with research highlighting that Tesla has been adapting its pricing strategies to stay competitive while managing profitability challenges. As for Tesla's return on equity (ROE) of 11.24%, this indicates a reasonable return to shareholders, considering the company's aggressive R&D expenditures and growth strategies. The paper by Wang also discusses Tesla's approach to balancing pricing and profit margins, noting that frequent price adjustments are part of Tesla's strategy to navigate market demands and competitive pressures . These financial figures collectively suggest that Tesla is prioritizing the expansion of its operations and market reach, even if this approach results in lower profit ratios compared to well-established companies like Apple [6].

Exxon Mobil is in contrast a profit-oriented company that maintains a well-balanced income. Exxon Mobil's profit margin of 10.00% is relatively low compared to Tesla and Apple; however, this is typical in the energy sector, where fluctuations in commodity prices are significant and require substantial investments. Exxon Mobil has an ROA (Return on Assets) ratio of 7.35%, showcasing its efficiency in asset utilization within the energy sector. The ROE of 14.69% reflects the company's ability to generate stable returns, underscoring the stability of its financial condition and good management. These key performance indicators (KPI) highlight how Exxon Mobil remains profitable in a cyclical industry and has hedged itself against income hardship by providing stability over time. The importance of financial ratios, such as those discussed here, is also emphasized in a study by Maryam Abdulwahed et al., which analyzes Exxon Mobil's financial condition using ratio analysis as a tool to assess the company's overall health and performance [7].

3.3. Market Value Ratios

Price-to-Earnings (P/E), Price-to-Book (P/B), Dividend Yield (D/P), Price/Earnings to Growth (PEG), Discounted Cash Flow (DCF) Estimate, and Momentum (50-Day Moving Average > 200-Day Moving Average) encompass the market valuation ratios as they are used for the valuation of companies. P/E ratio, which is the company multiplier of the trading price value and its EPS (earning per share) provides an idea of what the investors are willing to spend for a unit of earnings. On the

other hand, P/B reflects a ratio of the book value to the capitalization which can be calculated by the current market price divided by book value per share, and the company is overvalued when P/B is higher than 1. D/P can be calculated by dividing the company's annual dividend by its stock price, which is simply a return on what the investor has bought with dividend income only. PEG ratio adjusts the company's price over earnings by the company's expected growth rate and introduces a more complete valuation element that includes growth as well. DCF Estimate is a market valuation mechanism that takes into account cash flows in the future, which is the primary indicator of the intrinsic value of the company. Momentum involves comparison of the security's 50 days and 200 days moving averages to identify the current trend, with up momentum indicating a rise in prices. Table 3 given below elaborates on the same indicators for the three companies.

Table 3. Market Value Ratios

Company	P/B	P/E	Dividend Yield (D/P)	PEG (GARP)	DCF Cash Flow Estimate	Momentum (50-Day MA > 200-Day)
Tesla	11.85	61.18	N/A	1.06	N/A	Yes
Apple	45.23	30.23	0.57%	2.11	Yes	Yes
Exxon Mobil	1.97	14.24	3.19%	0.99	Yes	Yes

Tesla's P/E and P/B ratios are already on the higher side, which reflects investor confidence in its future growth prospects, even though these ratios indicate that Tesla's stock price is relatively high compared to its earnings and book value. The findings in Gafarov's master's thesis also highlight Tesla's significant net worth fluctuations, particularly in 2017, which contributed to changes in its book value per share. This fluctuation demonstrates how Tesla's growth expectations are priced into its stock despite historical volatility . Apple's market indicators, such as a high P/B ratio and a medium P/E ratio, suggest consistent growth and robust profitability. This aligns with the analysis by Simic and Jovicic, who discuss Apple's solid market position and how its P/E and P/B ratios are indicative of investor confidence in its financial health and long-term profitability. Meanwhile, Exxon Mobil's low P/E ratio (7.12) and relatively high Dividend Yield (3.71) suggest a stable but moderate return on investment, which may be attributed to its well-established presence in the oil and gas industry. The analysis by Simic and Jovicic further supports this interpretation by noting how such ratios reflect Exxon Mobil's market stability, despite slower growth prospects compared to tech companies like Tesla and Apple . Additionally, Tesla and Apple's higher PEG ratios reflect the higher beta exposure and growth potential in their respective markets. Exxon Mobil, on the other hand, shows a lower PEG ratio, consistent with its slower volatility trend, as explained by the energy company's revenue model. The DCF Cash Flow Estimate for Apple and Exxon Mobil suggests that both companies have predictable future cash flows, supporting the idea of steady growth. Lastly, all three companies exhibit positive momentum, as indicated by their 50-day moving averages being above their 200-day moving averages, signaling an upward trend in stock prices [8-10]. Insider Buying refers to the purchase of a company's shares by its insiders, mainly the executives, the board of directors, or employees with private knowledge of the firm, denoting a positive view of the company's future performance. Stock Buyback, on the other hand, is the repurchase of its own shares by a company out of market financial resources, usually to reduce the mignet of shares and with higher book value of the remaining ones. A thorough explanation of the three companies and the right indicators utilizing the above indicators is depicted upon the Table 4 below.

Table 4. Insider Buying and Stock Buyback

Company	Insider Buying ($)	Stock Buyback ($ Billion)
Tesla	Yes, $800 Million	Yes, $20 Billion
Apple	Yes, $1.5 Billion	Yes, $90 Billion
Exxon Mobil	Yes, $1.57 Billion	Yes, $20 Billion

The table exhibits one of the most positive trait factors known as insider confidence and shareholder value strategies among Tesla, Apple, and Exxon Mobil. There is insider buying of $800 million, $1.5

billion, and $1.57 billion by Tesla, Apple, and Exxon Mobil, respectively. Conversely, these organizations have a reasonable capital repurchase program, each company (Tesla, Exxon Mobil, and Apple) spent approximately $20 billion, while Apple leads by $90 billion buyback. It shows the fact that the top management members of all three companies mark up the stocks on their future growth selling unlike the agencies and other holders who generally sell on growth.

4. Results for Asset Selection

Essentially, there is a myriad of categories belonging to the different varieties of investors, each of them applying individual methods of investment that focus on distinct objectives. For example, value investors indentify poor valuation equities on the belief that the market participants will take notice of this and rectify the situation. The overriding imperative for income investors is ACY (aiming at consistency of yields) such as through dividend or interest and less on price appreciation. PEG investors incorporate aspects of both value and growth investing by using Price/Earnings to Growth ratio to determine if a stock is considered to either overvalued or undervalued in relation to growth potential. Index investors pursue only the average return in a specific market (like S&P 500) by buying out index funds rather than stocks because of their nature shift in money without regard to their fundamentals.

Moreover, ratio analysis investors, who weigh the company on the yardstick of its financial metrics to ascertain its operational state, and DCF (discounted cash flow) investors who are interested in the nuts and bolts of the possibilities cash flow estimation of a stock, are as well as momentum investors being the other category of investors who focus their attention on the gainers. Momentum investors, on the other hand, place their focus on stocks that are on a fast upward price trend, their approach is to ride the trend until it reverses. Insider buying as well as stock buyback vehicles regard the trust in the observations of corporate insiders, such as insider purchases and stock repurchases, and the positive implications these agents have on company performance. The following Table 5 presents the investment choices of several common types of investors regarding these three assets.

Table 5. Investing Selection

Types of Investors	Tesla	Apple	Exxon Mobil
Value			√
Income			√
PEG		√	
Index	√	√	√
Ratio Analysis			√
DCF		√	√
Momentum	√	√	√
Insider Buying	√	√	√
Stock Buyback	√	√	√

The table shows that Tesla, Apple, and Exxon Mobil attract different types of investors based on their distinct characteristics. For example, Tesla is interesting to a wide range of investors, including index, momentum, insider buying, and stock buyback investors, where the confidence in the potential growth of the company is also expressed. Apple, just as the leading and largest HSMC stock, attracts the attention of PEG, index, ratio analysis (RAT), discounted cash flow (DCF), insider buying (IB), and stock buyback (SB) investors because of the fundamental nature of the stock's underlying strength. Exxon Mobil, which is a relatively stable business indicated by a low beta and generous annual dividends, is good for value investors and income investors, while ratio analysis (RAT), discounted cash flow (DCF), high momentum (HiMo), insider buying (IB), and stock buyback (SB) are the preferences for growth and momentum investors using these techniques and expecting relatively high returns.

5. Conclusion

This study did an incisive approach into Tesla, Apple, and Exxon Mobil focused on their risk, profit, and evaluation ratio. It can be concluded that Tesla may be a speculation for a high risk, high gain investors, while a most suitable and intermediate alternative for a less of a risk with stable returns will be that of Exxon Mobil. Apple has the revenue generation and the diversity of the buyer appeal and has also an investor who is looking for growth and stability. This work will describe, in practice, to an investor who wants his or her investment be in alignment with key metrics under a desired strategy.

While this research offers stocks in the good context, it has some flaws. The in-depth study into the effects of current demand levies and other external market forces is absent. Other financial metrics also can be taken up to paint a full picture of the firm's performance.

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